## AN UNDESCRIBED SPECIES OF METEORUS FROM WISCONSIN

(Hymenoptera: Braconidae, Euphorinae) ${ }^{1}$

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During the study of insects associated with pulp logs stored in fards in central Wisconsin mumerous specimens of an undeseribed species of Metrorms were collected in light traps, bait traps and in tanglefoot on yellow trap boards. This species rums to couplet 13 in Mnesebeck's key (1923) and to fumipennis. The author wishes to express his apprectation to Mr. Muesebeck for the loan of specimens of 1I. fumipennis.

## Meteorus clinophthalmicus,2 n. sp.

Holotype \&.-Length, exelusive of oripositor, 0.8 mm .; antema 2.5 mm ; ;ab, domen 1.4 mm .; oripositor 1 mm .
Head.-Transerse, $1.2 \times$ width of thorax between tegulae, width $39^{3}$, greatest length $\because 4$, strongly receding behind cyes, maximum width across occipital carina 27 ; eyes large, bulging, ovoid ( 20 by 5 ), sparsely hairy; as seen from side temple S, eye wirlth 14; malar space 0.1 eye height; breadth of face measured across lower margins of antemal fossae 17 , at narrowest point between eyes 14 ; distance from lower margin of antemal fossac to anterior tentorial pits 11; face minutely transversely rugoso-punctate with pale, short hairs which are denser laterally and below; clypeus convex, twice as wide as high; rertex and temples smooth and polished, with sparse short pale hairs; ocell-ocular line 3 x and postocellar line $2.67 \times$ the greatest diameter of a lateral ocellus, the ocelli being relatively small and widely spaced; a groove extending from the median ocellus forward 0.3 the distance to the antemal fossae; flagellum 05 -segmented, the length of basal segment 9 , secoud 10 ( $3 \times$ as long as broad), third 8 , fourth 7 , the remaining segments becoming gradually shorter and relatively broader; pedicel 0.5 as long as first flagellar segment.

Thorax.-Slender, 2.5 x as long as wide between tegulae, notaulices sharply impressed to a depth of about half their width, crenulate, joining belind to form an impressed, rugose, $V$-shaped area before the hroad prescutellar furrow, the latter divided by three ridges into four foveac, short pale seattered hairs near notaulices and on sides of lateral mesonotal lobes; scutellum relatively small (width 7, length 7 ) and strongly arched, smooth and shining, with a few seattered hairs; propodeum irregularly rugoso-recticulate, with larger areolae indistinctly formed due to some ridges leing ligher than others, slightly exeavated centrally

[^0]at apex ; sides of pronotum mgosopunctate except along lower margin; mesopleurae mostly smooth above, with a broadly-impressed, coarsely roughened sternatulus; metapleurae rugose; renter of proand mesothorax smooth.
Legs.-Relatively long and slender.
Fore: coxa length 10; trochanter 15 (proximal segment 10 and distal 5, measured along rentral aspect of leg) ; femur 32 (width 7 ) ; tibia 36 ; tarsal segments $15,8,6,5,6$; claws 3.
Middle: coxa length 11; trochanter 15 (proximal segment 9 and distal 6); femur 36 (width 7) ; tihia 43 ; tarsal segments $21,9,7,5,6$.

Ilind: coxa jength 18; trochanter 17 (proximal segment 9 and (listal 8); femur 44 (width 10); tibia ( 55 ; tarsal segments $25,12,9,6,7$. Length of imner spur 8 , width of tibia at apex 6 .
Wings.-Fore: very lightly and evenly infuscated, veins brown; length 140, maxi mum width 44 ; stigma brown, paler at hase, length 28 , width 9 , immer side 18 , outer side 13 ; radial cell ending 9 before wing tip; first abseissa of radius 2.5 , second 3.5, thind 43 : second abseissa of cubitus 9 ; first intercubitus 12 ; second intercubitus 8; recurrent entering first culital cell 2 hefore junction of first intercubitus; nervulns postfureal for about its width.

Hind: nervellus 7 , lower abseissa of hasella 7, upper abscissa of basella 12.
Abdomen.-2.7 $x$ as long as wide across apex of secend segment; first segment 7 wide at base, 30 long and 18 wide at apex, spiracles at 12 from base and basal edge of dorsal fossae at 7 , the ridge between the fossae extending posteriorly beyond spiracles, plate beyond spiracles with irregular wrinkles and elongate depressions which tend to follow an arched path, diverging outwardly at base and converging posteriorly near apex; segment two 21 wide at hase, 32 wide at apex and 17 long, smooth, polished; suturiform articulation a weakly impressed straight line, indistinet; oripositor slightly decurved and witll a small dorsal notel at 4 from the apex (total length 60).

Color: head rery dark chocolate brown, face Burmese golel (3-C-11) ${ }^{4}$; apical third of clypens, basal two-thirds of mandibles, scape and pedical apricot (10-G7) ; first flagellar segment slightly hrowner than seape and the flagellar segments gradually becoming browner as apex is approached; eyes approximately Mohawk brown (7-H-12) ; palpi Polar Bear (9-B-2).

Thorax mostly Andorra brown ( $8-1-4$ ), propectus testaceons (4-B-11) ; fore and middle coxae and trochanters and posterior trochanters close to Capucine Buff (9-E-4) ; posterior coxae, all femora, tibiae and tarsi tawny (13-D-10); tegulae, sclerites at hase of forewing and leading edge of costa testaceous.

Abdomen testaceous to terra cotta (4-D-12) above in center, heroming darker brown apically and much more so on sides, first tergite also more infuseated on apical half; oripositor clear golden wheat (11-D-7), oripositor sleaths concolorous with propodeum.

Type locality and data on pin: Wood Co., Nekoosa, Wisconsin. IX-3-1948 R. D. Shemefelt. Bd. Type in collection of University of Wisconsin.

[^1]Allotypr $\delta$.-length 3.25 mm. Antemna 31 -segmented, 3.9 mm . long. Similar to of but with relatively longer antemae; propodem, more sharply angled between dorsal and posterior fitces, the dorsal fiace relatively longer, the central impression of the posterior fiace deeper; lower abscissa of basella equal to nerrellus but only half as long as upper abscissa; face nearly twice as broad as deep hetween anterior tentorial pits and lower edge of antennal fossie ( 21 wide, 11 deep) ; first abdominal tergite relatively broader at apex (width 25 , length 37). General coloration same as in holotype.

Wood Co., Nekoosa, Wisconsin. VIII-6-1948. R. D. Shenefelt. Bd. Tn collection of University of Wiscousin.
Paratypes.-To be deposited in the University of Wisconsin Collection, the U. S. National Museum, the Canadian National Collection, the Naturhistorisches Musemm, Wien, Austria and the author's collection.

A total of 109 o $\delta$ and 88 of 9 were taken in the Nekoosa yard during 1948 between July 7 and September 9 by W. W. Barrett or R. D. Shenefelt. A single specimen was eaptured June 16,1949 . The time of greatest abundance of adults is the latter part of Angust and early September.

This species varies considerably in size, ranoing from 3.4 to 2.5 mm . in the of $\%$ and from 4 to 2.5 mm . in the $\hat{\delta} \hat{\delta}$. C'olor is variable as to degree of darkness but the pattern seems to be consistent. The relative size of the eyes, the extent to which they bulge and the degree of slant inward also varies to a considerable extent. In some specimens the face appears relatively narrow as compared to others due to the difference in eye slant. The proportions of the first tergite are smbject to change. In four specimens ( $3 \hat{\delta}$ of and 1 it) the second intercmbitus is totally wanting, and in one $\delta$ the second intereubitus is fully developed in the left but absent in the rioht forewing.

Differs from hypophloci Cushman in the narrower, less robust thorax, much narrower face, more protuberant and more sloping eyes, shorter malar space and less strongly decurved ovipositor.

Clinophthalmicus can be separated from fumiponmis Mnesebeck by the relatively narrower head as compared to the width of the thorax between the tegnlae. In fumipenmis, the head width is 1.50 x that of the thorax while in climophthalmicus it is 1.2 x . The relatively shorter lower abseissa of the basella and longer malar space will separate climophthatmicus from angustipenmis TIuesebeek.

## Reference

Muesebeck, C. F. W., 1923. A revsion of the North American species of Ichneumon-flies belonging to the genus Metcorus Haliday. Proc. U. S. Nat. Mus. $63(\simeq 470)$ : 1-44.


[^0]:    ${ }^{1}$ Results of a cooperative project of the Wisconsin Agricultural Experiment Station, College of Agriculture, University of Wisconsin, supported in part by the Nepeo Foundation and the Wisconsin Conservation Department. Approved for publication by the Director of the Wisconsin Agricultural Experiment Station.
    ${ }^{2}$ From $\kappa \lambda i \hat{\omega}$-slope and $\dot{\delta} \varphi \omega a \lambda \mu$ - the eye. In reference to the inwardly slanting eyes.
    ${ }^{3} 60=1 \mathrm{~mm}$. in the measnrements as given in the deserintion.

[^1]:    ${ }^{4}$ Color names from Maerz, A. and M. R. Paul. 1950. A Dictionary of Color. Ed. 2. McGraw-Hill. Numbers within parentheses refer to plate nmber, column and row.

